

### REMARKS

The Office Action dated January 18, 2007 and Advisory Action dated May 4, 2007 have been received and carefully studied.

A Request for Continued Examination is submitted herewith.

The Examiner maintains the rejection of claims 1-2 and 4-5 and 23 under 35 U.S.C. §103(a) as being unpatentable over Brown, et al., U.S. Patent No. 4,990,248. The Examiner states that Brown teaches the tube 62 being the innermost tube of the cartridge but not of the cylindrical container. The Examiner concludes that it would have been obvious to remove the post-filter 75 should it be desirable to replace less than the entire filter cartridge and omission of an additional filtering step would be obvious if this feature were not desired.

The rejection is respectfully traversed.

Applicants respectfully submit that in articulating the various elements of Brown that allegedly meet the limitations of the instant claims, the Examiner has improperly combined disclosure of Brown that relate to very different embodiments. Specifically, the Examiner cites various elements of two Brown embodiments interchangeably, namely, the embodiment of Figures 1-4 of Brown and the very

different embodiment of Figure 5 of Brown. Careful analysis of each of the embodiments of Brown independently reveals that Brown does not disclose or suggest the module of the present invention as claimed.

First, with respect to the embodiment of Figures 1-4 of Brown, Brown expressly states that the apparatus comprises a reverse osmosis cartridge 10, comprising spirally wound prefilter 16, reverse osmosis membrane permeator 11, and post-filter 30. The cartridge 10 is installed in housing tube 44. Thus, the prefilter, the reverse osmosis membrane and the post-filter all make up the cartridge 10, which is replaceable in the housing tube 44.

In contrast, claim 1 expressly recites a cylindrical container (corresponding to Brown's housing tube 44) in which are housed, *inter alia*, (1) pretreatment means (corresponding to the Brown prefilter 16), and (2) treatment means. The claim further recites that the treatment means (and thus not the pretreatment means) includes a cartridge including one or more selectively permeable membranes. Claim 1 further recites that the pretreatment means is housed in the external cylindrical space of the container and the cartridge is housed in the internal cylindrical space of the container. No such

cartridge that is independent of pretreatment means is disclosed or suggested in this embodiment of Brown. Indeed, to the extent the Examiner is relying on element 15 of Figure 2 as an impermeable barrier layer that divides the container into two distinct cylindrical spaces, there is no cartridge housed in the internal cylindrical space so defined, as required by the instant claim 1.

The Examiner states that Brown discloses the treatment means being a cartridge, and cites Figure 2, element 11 and column 4, lines 6-17 in support of this statement. However, element 11 of Figure 2 is a permeator. Column 4, lines 6-17 describe the various layers of this permeator, but never disclose or suggest that it is a cartridge. Indeed, as stated above, Brown in numerous places indicates that the cartridge includes the combination of the prefilter 16, the reverse osmosis membrane permeator 11, and the post-filter 30. By providing a separate cartridge for the treatment means, the present invention has the advantage of changing that cartridge without also changing the pretreatment means. This is nowhere disclosed or suggested by Brown.

Figure 5 of Brown relates to the second embodiment disclosed in Brown. It discloses a removable and disposable filter cartridge 60 enclosed within housing tube

62. The filter cartridge 60 includes an inner permeator mounting tube 62 that is capped with a cartridge end cap

63. Both the inner annular reverse osmosis membrane permeator 70 and the outer annular prefilter 72 are spirally wound on the permeator mounting tube 62, and are therefore both part of the cartridge 60, as is the impermeable barrier layer 71 positioned between the prefilter 70 and the permeator 70. Accordingly, the Figure 5 embodiment of Brown also does not disclose or suggest that the treatment means 70 (and thus not the pretreatment means 72) includes a cartridge including one or more selectively permeable membranes. Nor does this embodiment of Brown disclose or suggest that the pretreatment means 72 is housed in the external cylindrical space of the container and the cartridge is housed in the internal cylindrical space of the container. Indeed, the impermeable barrier 71 that divides the Brown cartridge is contained within that cartridge and thus cannot possibly define internal and external cylindrical spaces of the housing tube 52 wherein the cartridge is housed in the internal space.

Accordingly, even if one skilled in the art were somehow motivated to completely eliminate the post-filter


in either Brown embodiment, the present invention as claimed would not be arrived at.

The Examiner maintains the rejection of claims 6, 7 and 18-21 under 35 U.S.C. §103(a) as being unpatentable over Brown in view of Regunathan et al., claims 8, 10-12 and 22 as being unpatentable over Brown in view of Regunathan and further in view of Whittier et al., claims 13-16 as being unpatentable over Brown in view of Regunathan and Whittier and further in view of Burrows, claim 9 as being unpatentable over Brown in view of Regunathan and Whittier and further in view of Petrucci et al., and claim 17 as being unpatentable over Brown in view of Regunathan and Whittier and further in view of Gundrum et al.

These claims are believed to be allowable by virtue of their dependence, for the reasons articulated above with respect to Brown et al. None of the secondary references supplies the above-noted deficiencies of Brown.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,

  
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